

monoplastic; each sperm receives one plastid. SAPĚHIN claims that the bodies described by ALLEN, in the spermatogenesis of *Polytrichum*, as blepharoplasts, are nothing but plastids. Since SAPĚHIN'S account is not illustrated, one must feel rather skeptical in regard to his interpretation of ALLEN'S work.—CHARLES J. CHAMBERLAIN.

Botrychium Lunaria.—LANG⁵¹ has published the first of a series of papers on the vascular anatomy of the Ophioglossaceae. From examination of *Botrychium Lunaria* he concludes that the internal endodermis is a new formation without morphological significance. The occurrence of occasional tracheids in the pith, especially in injured plants, is accepted as conclusive evidence of the stelar nature of the pith. These scattered tracheids are primary in their origin and by reason of their position are identified as centripetal xylem; hence this species of *Botrychium* has mesarch stem structure.

Axillary buds are of constant occurrence in this species, as in *Helminthostachys*. These develop only in case of injury to the terminal bud. The vascular supply of the branch arises from the trace of the leaf immediately below by the development of adaxial xylem; occasionally the xylem of the branch may be connected directly with that of the main stem.—L. C. PETRY.

Lichens of the Galapagos Islands.—STEWART⁵² has reported on the lichens collected by the expedition of the California Academy of Sciences to the Galapagos Islands in 1905-1906. These islands have long been of great biological interest, so that any collection from them promises to be worth noting. The list numbers 47 species, 7 of which are undetermined. The genera represented are as follows: *Alectoria* (1 sp.), *Arthonia* (4 spp.), *Buellia* (2 spp.), *Chiodecton* (1 sp.), *Cladonia* (6 spp.), *Coenogonium* (1 sp.), *Lecanora* (3 spp.), *Lecidea* (1 sp.), *Pannaria* (1 sp.), *Parmelia* (4 spp.), *Pertusaria* (2 spp.), *Physcia* (2 spp.), *Placodium* (1 sp.), *Pyrenula* (1 sp.), *Ramalina* (5 spp.), *Rinodina* (1 sp.), *Roccella* (2 spp.), *Sticta* (2 spp.), *Teloschistes* (1 sp.), *Usnea* (4 spp.), *Verrucaria* (1 sp.).—J. M. C.

Plants of northwestern Canada.—STANDLEY⁵³ has determined the plants collected by an expedition to the Mount Robson region of eastern British Columbia and western Alberta in 1911, under the auspices of the Alpine Club, whose headquarters are at Banff, Alberta. The collection includes about 200 numbers, all of which are angiosperms except 5 mosses, 6 pteridophytes, and 3 gymnosperms. A new species was discovered in each of the following genera: *Carex*, *Vagnera*, *Artemisia*, *Aster*, *Gaillardia*.—J. M. C.

⁵¹ LANG, WILLIAM H., Studies in the morphology and anatomy of the Ophioglossaceae. I. On the branching of *Botrychium Lunaria*, with notes on the anatomy of young and old rhizomes. *Ann. Botany* 27:203-242. figs. 1-14. pls. 20-21. 1913.

⁵² STEWART, ALBAN, Notes on the lichens of the Galapagos Islands. *Proc. Calif. Acad. Sci.* IV. 1:431-446. 1912.

⁵³ STANDLEY, PAUL C., Plants of the Alpine Club expedition to the Mount Robson region. *Canadian Alpine Journal*, special number, pp. 76-97. 1912.